



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Adress: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,955	01/09/2006	Thomas E. Rajewski	3187-01	5531
26645	7590	03/05/2009	EXAMINER	
THE LUBRIZOL CORPORATION			GOLBOY, JAMES C	
ATTN: DOCKET CLERK, PATENT DEPT.				
29400 LAKELAND BLVD.			ART UNIT	PAPER NUMBER
WICKLIFFE, OH 44092			1797	
			MAIL DATE	DELIVERY MODE
			03/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,955	<b>Applicant(s)</b> RAJEWSKI ET AL.
	<b>Examiner</b> James Goloboy	<b>Art Unit</b> 1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 09 January 2006.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-19 is/are rejected.
- 7) Claim(s) 8 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application<br>Paper No(s)/Mail Date _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

**DETAILED ACTION**

***Claim Objections***

1. Claim 8 is objected to because of the following informalities: Claim 8 recites "wherein said lubricant comprises a carboxylate ester, polyalkylene glycol". It is not clear whether the claim requires the lubricant to contain both a carboxylate ester and a polyalkylene glycol, or just one or the two. It is the examiner's opinion, based on similar claims, that applicant intends for the composition to comprise a carboxylate ester or a polyalkylene glycol Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Lachaud (GB 2149814).

On page 1 lines 33-37, Lachaud discloses a lubricant for a gas compressor more preferably comprising a mineral oil, meeting the limitations of component (a) of claim 19, and 10 to 30% by weight of a thickener, within the range recited for component (b) of claim 19. On page 1 lines 46-50, Lachaud discloses that the thickener is preferably a

polymer, as in component (b) of claim 19. The composition of Lachaud therefore meets the limitations of the composition of claim 19.

4. Claims 1-4, 6-9, 13, 16, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakanoue (EP 1085077).

In paragraph 2, Sakanoue discloses a refrigerating machine containing a compressor and a lubricating oil. In paragraph 12 Sakanoue discloses that the lubricant can be a blend of a synthetic oil, as recited in component (a) of claims 1 and 18-19, with 1 to 20% by weight of a polyalkylene glycol either, meeting the limitations of the polymeric additive of component (b) of claims 1 and 18-19. The blend of polyalkylene glycol with synthetic oil also meets the limitations of claims 3, 6, 8-9, and 16. In paragraph 20 Sakanoue teaches that the molecular weight of the polyalkylene glycol is preferably from 800 to 2,000, within the range recited in claims 4, 9, and 13. In paragraph 26 Sakanoue discloses that the composition can contain further additives as recited in component (c) of claims 1 and 18-19. In paragraph 1 Sakanoue discloses that the refrigerant used in the machine can be a hydrofluorocarbon, as recited in claim 2, or ammonia, carbon dioxide, or hydrocarbon, as recited in claim 7.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-2, 4-5, 7, 10-15, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lachaud.

On page 1 lines 15-24, Lachaud discloses a lubricated gas compressor. On page 1 lines 34-37, Lachaud discloses that the lubricant for the compressor more preferably comprises a mineral oil, meeting the limitations of component (a) of claims 1 and 18 as well as claims 5 and 10, and a thickener. On page 1 lines 46-50, Lachaud discloses that the thickener is preferably a polymer, as in component (b) of claims 1 and 18, and especially polyisobutylene, meeting the limitations of claims 11-12. The polymer preferably has a molecular weight of 3,000 to 25,000, within the range recited in claims 4, 11, 13, and 15. Lachaud teaches that the compressor further contains a refrigerant fluid, and on page 1 lines 27-32 discloses that the fluid can be a chlorofluorocarbon, as recited in claims 2 and 17. The refrigerant can also include ammonia, which when gaseous as discussed on page 1 lines 19-20 meets the limitations of claims 7 and 14. The difference between Lachaud and the currently presented claims is that Lachaud does not disclose concentrations of polymeric thickener within the claimed ranges.

Lachaud, on page 1 lines 36-37, discloses that the composition preferably contains from 10 to 30% by weight of polymeric thickener, overlapping the ranges recited for the polymers in claims 1-2, 4-5, 10-15, and 17-18. See MPEP 2144.05(I): "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976);"

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hauenstein (U.S. Pat. No. 5,629,273) discloses a lubricating fluid useful in gas compressors containing polybutylene in concentrations as low as 10% by weight.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is (571)272-2476. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Calderola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCG

/Glenn A Calderola/  
Acting SPE of Art Unit 1797